

The Geography of Relationships in Sweden: Matri- and Patrilocal Bias in Childbearing Unions

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The purpose of this study is to describe the distance between adult individuals and their parents, and find out whether couples who have a child tend to live closer to the man's or the woman's parents. Inter-generational proximity has been established as an important factor for family relationships. Proximity has been linked to higher levels of communication and both financial and non-financial support (Mulder and van de Meer, 2009, Michielin and Mulder 2007). Some authors have also addressed the geographic relationship between generations in the Swedish context (Malmberg and Petterson 2007, Bordone 2009). However, the settlement patterns of couples in relation to their families of origin is largely unexplored. The existence of a bias in the residential arrangements of new families depends on a number of factors. It is worthwhile investigating as it can produce significant outcomes both in how kinship is experienced as well as on concrete patterns of support, obligations and care. This study makes a contribution using Swedish administrative register data to capture distances between parents of couples in Sweden which had a first birth in 2007 (N=80 130 individuals) and their respective parents.

Inter-generational proximity is associated with individual benefit for adult children as well as their parents. Proximity to parents also suggests proximity to further social and family networks. If access is unequally distributed across genders, then there is a systematic advantage to one family network in a relationship. Furthermore, if unions tend to form near one set of grandparents rather than the other, then this tendency could explain patterns of grandparent-child interaction. This tendency extends beyond grandparents to all kin, introducing a matri/patri-lineal bias to interactions and exchanges.

When compared to other European countries, Sweden tends to rank low on family obligations, geographic proximity, and frequency of communication (Hank 2007). Nevertheless, studies using Swedish registry data focusing on 55 year-olds (Lundholm and Malmberg 2009), as well as SHARE data including adults over 55 (Bordone 2009) have shown that roughly 50% of parents live within 25km of an adult child. Analyses of other European societies have found age, number of siblings, being a woman, and having higher education have all been associated with living away from parents. Likewise in Sweden, older, single, more educated people, especially women, are less likely to live within 50km of their parents, while having own children is strongly associated with living nearby (Lundholm and Malmberg). Thus Swedish couples who experience a first birth are likely to live near at least one set of grandparents, and these are likely to be the man's parents.

Considering the couple as a unit when analyzing distance patterns is important, because couples make joint residential decisions. Analysis from the perspective of a couple has been uncommon, with just one study using the Netherlands Kinship Panel Study to investigate distances between couples

and their parents in the Netherlands, finding a tendency towards the man's parents (Blaauboer, Mulder and Zorlu 2010). The present study is based on comprehensive registry data, rather than survey data, and thus presents a possibility to more thoroughly examine the subject.

There are various factors that can explain a bias towards either genders parents being more proximate. Living closer to one partner's parents is likely a consequence of individual migration (such as educational or career) decisions, which affect where couples meet, as well as joint decisions regarding where the new family should settle. There are also other various factors that affect settlement decisions, such as the qualities of individual family relationships, demand for care from elderly parents, etc. With regards to the place where unions are formed, women are more likely to move away from their home municipality, so its likely that more partnerships will be formed in the mens home municipality. Education is a major mobility factor for young people, and will therefore be a focus for the study.

Data and Method

This study uses Swedish administrative registry data, analyzing data on both partners in all couples who had a first birth in the year 2007. Using first births allows the analysis to capture cohabiting as well as married couples in order to more completely describe relationships in Sweden.

The data were assembled using Swedish registers to link generations and include SAMS-region geographic co-ordinates of the couple and the four respective parents associated with the relationship. There are around 9200 SAMS regions in Sweden and they are the smallest geographic division available, and represent sub-units of municipalities. The data make it possible to measure whether the couple live in the same region as one or both sets of parents and if the parents are living in the same area or not. There is also information on the geographic midpoint of the region so it is possible to calculate the distance between the kin. Data is also available on the age and educational level of both partners in the couple. This study is a comprehensive analysis of Swedish families due to the detailed geographic-level data as well as the complete population coverage.

The method is to produce descriptive on distance in each parent-grandparent dyad (from the man and woman in the couple to their respective mother and father). For the sake of analysis, age is grouped into 0-25, 25-35, and 35+; education is grouped into primary, secondary, and tertiary; distance is categorized into 0 (same SAMS region), 1-20km, 20-50 km, 50-300 km, 300-1000km and 1000+km. Couples have been sorted to produce a matrix of 9 combinations of education levels.

Selected Results

Table 1 shows descriptive statistics. Figure 1 shows the density distribution for the distance in each of the four dyads (woman to her mother and father and man to his mother and father). Figure 2 shows the distance by age from the man and the woman to their respective mothers. These figures demonstrate the individual-level patterns of distance between families. Level of education (primary,

Mother		Father	
Age Quintile		Age Quintile	
25%	26	25%	29
50%	30	50%	32
75%	33	75%	35
Education		Education	
Primary	8.82% (3518)	10.39% (4183)	
Secondary	38.24% (15247)	47.22% (19011)	
Tertiary	52.93% (21102)	42.39% (17069)	

Table 1: Descriptives for partners in unions with a first birth in 2007

secondary, tertiary) as well as educational disparity between partners is also linked to distance from parents for both men and women (results not shown). Within all educational combinations, however, more couples live closer to the father’s parents. Table 2 shows the ratio of couples living closer to the man’s rather than the woman’s parents, given the educational attainments of both parents. The ratio is consistently in the man’s favor.

Figure 1 shows the distance between the couple and their respective parents. The distributions show that about 15% of the women and 18% of the men live in the same area as their mothers (this figure is about 12% and 16% for fathers). A further 15% of men and women live 20km from their parents. Altogether, the density plots show that close proximity is quite common between generations, with men in the couples overall living closer to their parents than women.

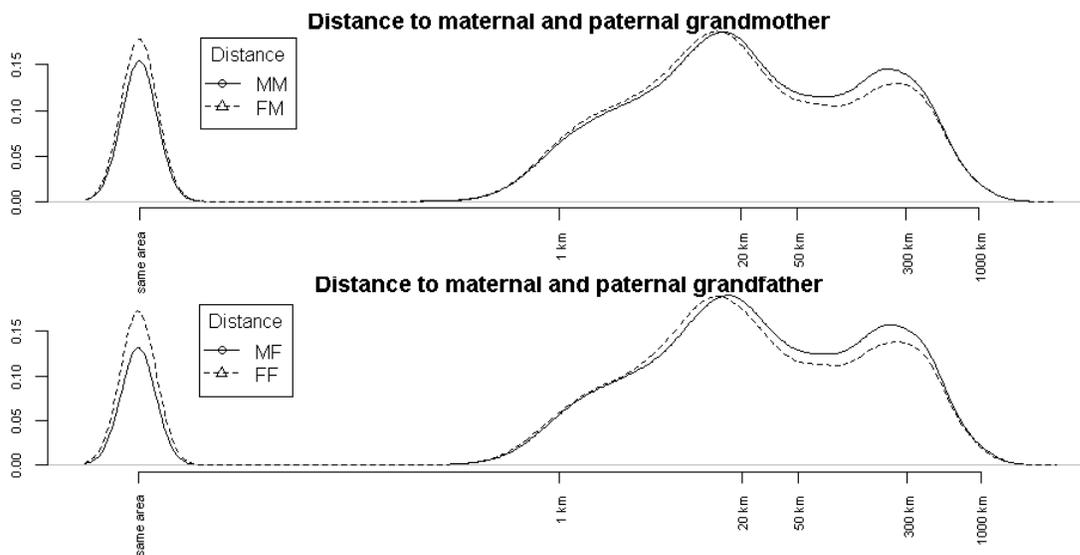


Figure 1: Density plot for distance in each parent-grandparent dyad.

Figure 2 shows how the distance to the mothers of the couple (the mother’s mother and father’s mother) varies by age. The results are shown by the age of the mother in the couple, as the women

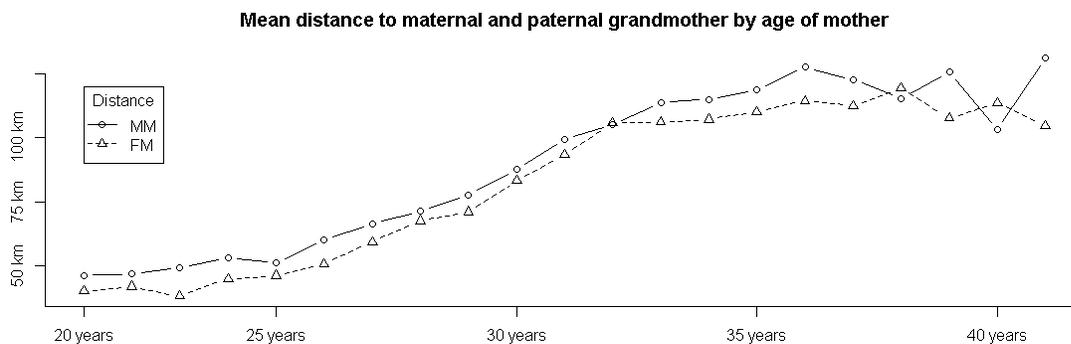


Figure 2: Density plot for distance to paternal and maternal grandmother by age of mother.

	Mother Primary	Mother Secondary	Mother Tertiary
Father Primary	1.15	1.10	1.13
Father Secondary	1.09	1.12	1.10
Father Tertiary	1.11	1.04	1.03

Table 2: Ratio of couples living closer to the father’s parents versus the mother’s parents by respective educational status.

tend to be younger than the men at the time of the first birth. The distance to both the maternal and paternal grandmother rises clearly over time. Nevertheless, fathers are consistently closer to their mothers, regardless of age.

Our results for geographical distances to parents with a small bias for male kin confirm findings from the Netherlands. Our results are also in line with previous results on distances between individuals and their parents in Sweden. In future extensions we will further explore the interaction between education and proximity to parents.

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